




Federal Highway Administration, USDOT

The Final Rule on Work Zone Safety and Mobility

Updates to 23 CFR Section 630, Subpart J

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**BEGIN
WORK
ZONE**

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Agenda

- What is the “Final Rule”?
- Why update the “Final Rule”?
- Overview of the “Final Rule”
- Influence on Project Delivery
- How NCDOT is responding to the change?



What is the Final Rule?



What is the “FINAL RULE”?

- What is the “final rule”**23 CFR 630 Subpart J**
- Everything the Federal Government funds and oversees has rules and regulations and these are documented in the Code of Federal Regulations manual (CFR)
- Obviously, highways are an integral part of the operation of our transportation infrastructure and thus have Federal moneys allocated for highway construction



What is the “FINAL RULE”?

- The Code of Federal Regulations is divided into 50 areas or “Titles”
- **Title 23- Highways**
 - *Title 23- Highways- Has 3 Chapters*
 - Chapter 1- Federal Highway Administration, Department of Transportation
 - Chapter 2- National Highway Traffic Safety Administration and Federal Highway Admin
 - Chapter 3- National Highway Traffic Safety, DOT

What is the “FINAL RULE”?

- Title 23- Highways: Chapter 1- Federal Highway Administration is our focus
- Chapter 1 has 11 “Subchapters” labelled A thru K
 - *SubChapter G- is the location for “Engineering and Traffic Operations “*
 - Part 630 is the location for “PreConstruction Procedures”
 - SubPart J is the location for “Traffic Safety in Highway and Street Workzones”
- Hence, the reference 23 CFR Part 630, Subpart J





Why Update the Final Rule?

Why Update the WZ Rule

- Legislative requirement
 - Congress required the FHWA to review current work zone problems and update the regulation to:

“Better reflect current needs for improved safety and to minimize disruptions to traffic during the construction of highway projects”

- So, we were told to update the regulation, but
- We also believe that it makes good sense to update it

Why Update the WZ Rule

Influencing Factors:

- **Growing traffic volumes and congestion**
 - Vehicle travel up, but very little growth in road miles
- **Our highways are approaching middle age**
 - More construction and repair is needed, which means more work zones
- **More work is done under traffic**
 - Compressed contractor schedules
 - Increasing night work
- **Work zone safety continues to be a concern**
 - Over 41,000 injuries and 1028 fatalities in 2003
- **Travelers are not happy with work zones**
 - Unexpected road conditions and inconsistency cause traveler frustration

Why Update the WZ Rule

Fatal Crashes in North Carolina Work Zones

- 2000- 29 Fatal Crashes - 2.0% of all Fatal Crashes
- 2001 - 33 Fatal Crashes - 2.3% of all Fatal Crashes
- 2002 - 35 Fatal Crashes - 2.4% of all Fatal Crashes
- 2003 - 33 Fatal Crashes - 2.3% of all Fatal Crashes
- 2004 - 43 Fatal Crashes - 3.1% of all Fatal Crashes



Overview of Final Rule

Overview of the Final Rule

Goals:

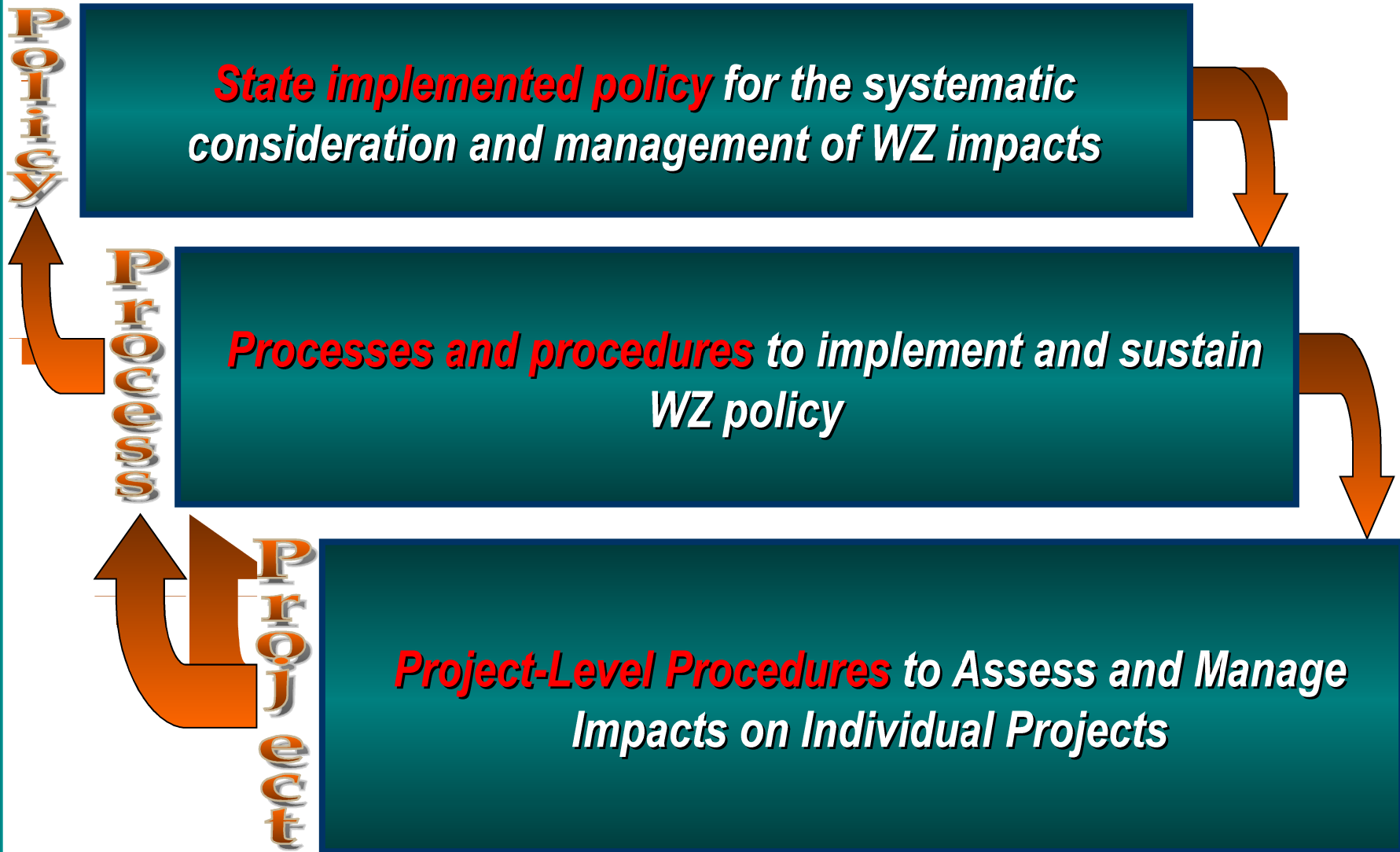
- Expand thinking beyond the actual “Project” itself
 - Focus efforts to address Corridor, Network, and Regional issues while planning and designing road projects
- Expand WZ management beyond “traffic safety and control”
 - Address mobility in addition to safety
 - Facilitate customer-focused project development through comprehensive consideration of work zone impacts
 - Address current day issues with “operations and management” and “public information”
- Advocate innovative thinking in “Project” Planning, Design, and Management.
 - Consider alternative/innovative design, construction, contracting and traffic management strategies

Overview of the Final Rule

Specific Focus Areas:

- Implement an Agency developed Work Zone Safety and Mobility Policy
- Identify “**Significant Projects**” early and PLAN for their design, construction, contracting and traffic management strategies
- Communicate more effectively with the **public and other stakeholders**
- Emphasize **work zone focused training**
- Emphasize **performance monitoring and assessment**

Provisions



Policy

- State implemented **WZ safety and mobility policy**
 - *Systematic consideration and management of WZ impacts throughout project development and implementation based on State criteria*
 - *Sensitive to varying project characteristics and expected WZ impacts*
 - *Multi-disciplinary team approach*



Standard Processes/Procedures to support the Policy

Standard processes / procedures to

- Assess and manage WZ impacts
- Require training for personnel
- Use crash and operational data for process / procedural improvement
- Conduct bi-annual performance reviews

Project-Level Procedures

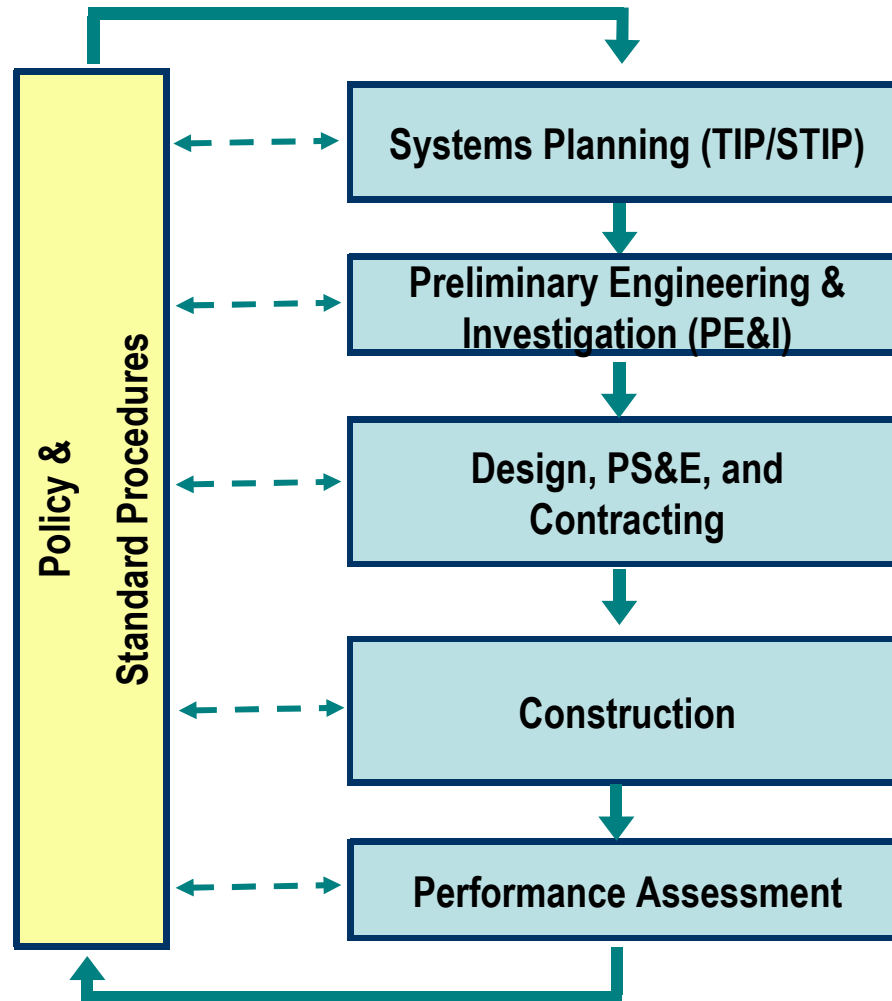
Project-Level Procedures to:

- Identify “Significant” projects
- Develop Transportation Management Plans (TMPs) for the “Significant” projects
- Include appropriate TMP provisions in the PS&Es
- Implement and monitor TMPs for “Significant” Projects
- Assess Performance for “Significant” Projects

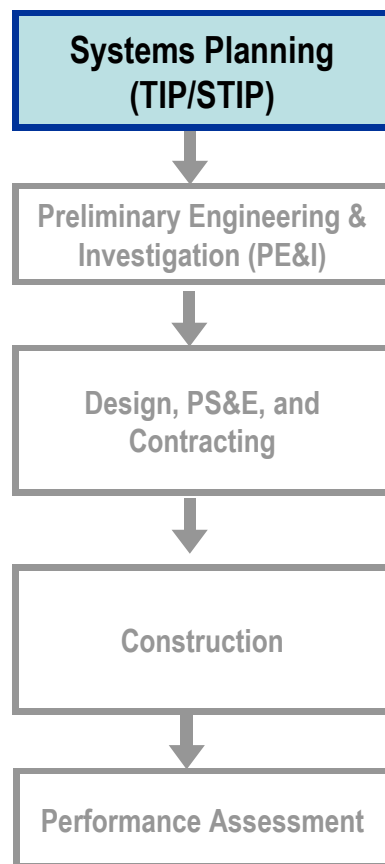


Influence on Project Delivery

Project Delivery Cycle

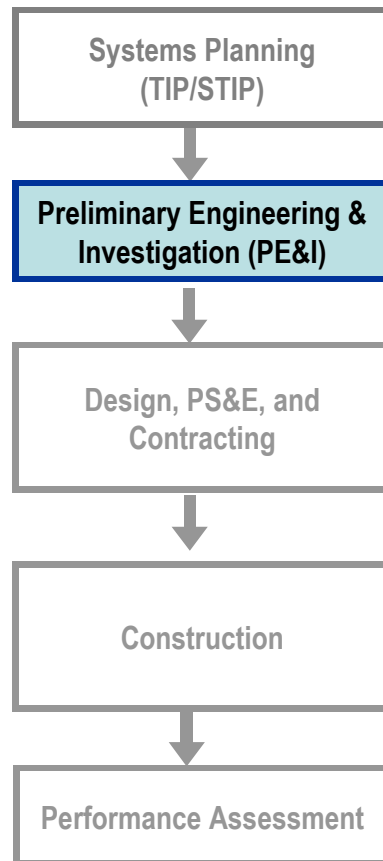


Systems Planning (TIP/STIP)



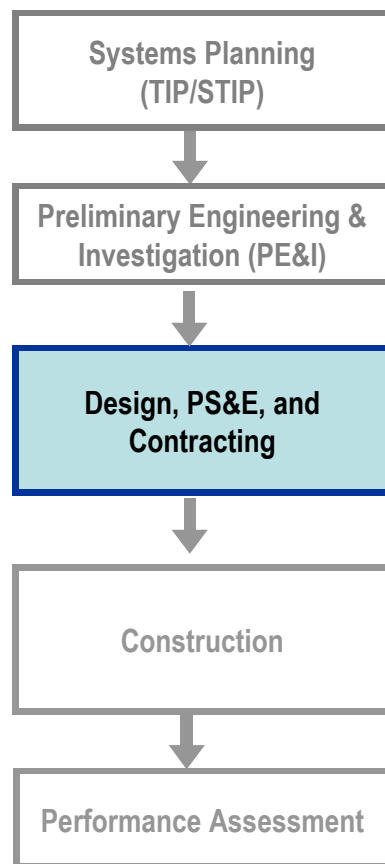
- Identify projects expected to cause “significant work zone impacts” early in the project development process

Preliminary Eng. / Investigation (PE&I)



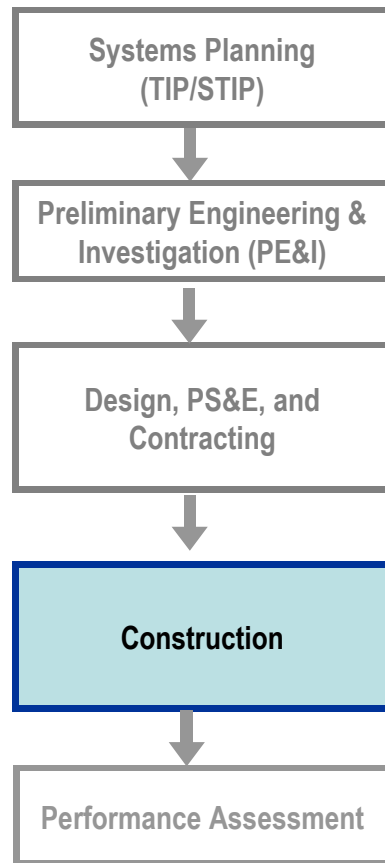
- Identify potential WZ impacts
- Identify potential transportation management strategies
- Identify other coordination issues

Design, PS&E, and Contracting



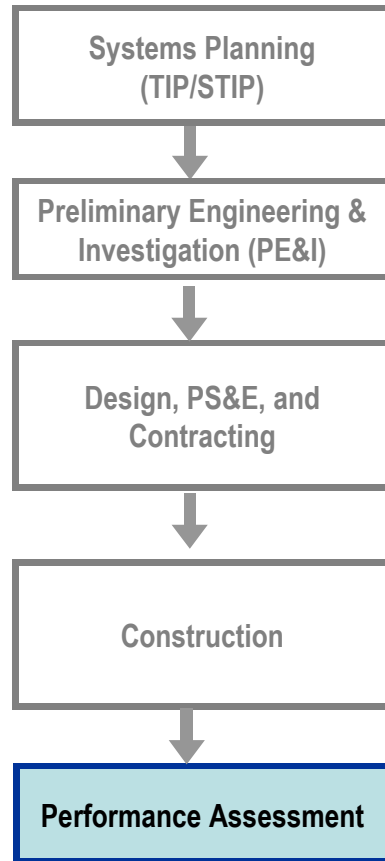
- Assess WZ impacts (progressively and comprehensively)
 - Address alternative design, construction, contracting, and management strategies in the assessment
- Develop appropriate TMP
- Include appropriate TMP items in PS&E

Construction



- Implement TMP requirements
- Monitor safety and mobility
 - Use field observations, crash data, and operational information to manage impacts
- Consult with appropriate stakeholders
- Review random projects as appropriate

Performance Assessment



- Analyze crash and operational data from multiple projects
 - Towards improving processes and procedures
- Maintain data and information resources to support improvements
- Conduct bi-annual process reviews
 - WZ data analysis and/or project reviews
 - Improve WZ processes and procedures, data and information resources, and training programs

In Summary

- Advance WZ considerations as early as practical
- A State driven approach – implement an “Agency” Work Zone and Mobility Policy to consider and manage WZ impacts of “Significant Projects”
- Develop and implement State-level procedures for systematic consideration and management of Project impacts for “Significant Projects”

In Summary (cont.)

- Manage the WZ impacts of projects by developing and implementing TMPs appropriate to the project
- Monitor the performance of “Significant Projects” during implementation and make changes to TMP, if necessary
- Analyze post-construction data across multiple projects to improve policy, practices, processes and procedures

In Summary (cont.)

- **Published September 9, 2004**
- **All States to be in full compliance by October 12, 2007**
- **North Carolina is recognized as a “lead state” and has volunteered to be an early implementer**
- **North Carolina is shooting for full implementation by October 2006**



How NCDOT is responding to the change?

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NCDOT Work Zone Safety and Mobility “Policy”

- Develop an **“AGENCY”** Awareness of the Importance of the “Systems Engineering” Approach to Work Zone Planning
- Create a Process to Describe How to Identify **“Significant Projects”**
- Establish a Process to Measure the Work Zone “Impacts” on **“Significant Projects”** Both Within and outside of the Project Limits

How NCDOT is responding to the change?

The Policy....How Do We Do it?

A multi-disciplinary Team is already in place




(Planning/Pre-Construction/Construction/
Contract Delivery/
Operations/Maintenance/FHWA)

How NCDOT is responding to the change?

The team is in the process of:

- Developing a Department wide policy; **“NCDOT Work Zone Safety & Mobility”** and plans for its implementation.
- Developing a process to identify “Significant Projects”
- Putting together a plan to educate NCDOT staff to expand their thinking to address corridor, network, and regional issues while planning and designing road projects.



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